

Title (en)

CONTROL METHOD AND CONTROL CIRCUIT FOR A MOTOR DRIVE OF AN ELECTRONIC STEERING LOCK

Title (de)

ANSTEUERVERFAHREN UND ANSTEUERSCHALTUNG FÜR EINEN MOTORANTRIEB EINER ELEKTRONISCHEN LENKUNGSVERRIEGELUNG

Title (fr)

PROCÉDÉ DE COMMANDE ET CIRCUIT DE COMMANDE POUR UN ENTRAÎNEMENT MOTORISÉ D'UN VERROUILLAGE DE DIRECTION ÉLECTRONIQUE

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Application

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Abstract (en)

[origin: WO2009010397A1] The invention relates to a method for controlling a motor drive of an electronic steering lock. According to said method, a drive motor (1) is coupled to a voltage supply system (2, 3) via at least one power circuit component (4A-4D) in such a manner that power flows through the drive motor when the power circuit component is switched on. The invention is characterized in that the power circuit component is controlled by a sequence of impulses of a defined frequency and a defined pulse duty factor. The pulse duty factor is varied depending on at least one parameter of the movement pattern of the movement of a transmission of the electronic steering lock driven by the drive motor, for example depending on the position of a moving transmission component, especially depending on the position of the transmission on the trajectory between a locked position and an unlocked position. The corresponding control circuit for a motor drive of an electronic steering lock comprises at least one power circuit component (4A-4D) which is coupled between a voltage supply system (2, 3) and a drive motor (1), and a controller (6) having at least one control output (5A-5D) controlling the power circuit component with a sequence of impulses of a defined frequency and a defined pulse duty factor. At least one input (7) of the controller (6) is coupled to at least one sensor to detect a position of a moving component of the transmission. The controller varies the pulse duty factor depending on at least one parameter of the movement pattern of the transmission.

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